APPENDIX 1: Amended Specification Paragraphs – Clean Copies

Page 46, paragraph beginning at line 12.

The shuttle vector pT0021, in which the firefly luciferase (*lucFF*) expression is controlled by the *ars* (arsenite) promoter/operator (Tauriainen et al., 1997), was modified in the following fashion. Two oligonucleotides corresponding to a short antigenic peptide derived from the heamaglutinin protein of influenza virus (HA epitope tag) were synthesized (Field et al., 1988). The sense strand HA tag sequence (with *BamH*I, *Sal*I and *Hind*III cloning sites) is: 5'-gatcccggtcgaccaagcttTACCCATACGACGTCCCAGACTACGCCAGCTGA-3' (SEQ ID NO. 11) (where upper case letters denote the nucletotide sequence of the HA tag); the antisense strand HA tag sequence (with a *Hind*III cloning site) is: 5'-agctTCAGCTGGCGTAGTCTGGGACGTCGTATGGGTAaagcttggtcgaccgg-3' (SEQ ID NO. 12) (where upper case letters denote the sequence of the HA tag). The two HA tag oligonucleotides were annealed and ligated into pT0021 vector which had been digested with *BamH*I and *Hind*III. This manipulation resulted in replacement of the *lucFF* gene by the HA tag. This modified shuttle vector containing the *arsenite* inducible promoter, the *arsR* gene, and HA tag was named pTHA. A diagram outlining our modification of pT0021 to generate pTHA is shown in Fig. 1.

Page 46, paragraph beginning at line 28.

Each ORF, encoded by Bacteriophage 77, larger than 33 amino acids and having a Shine-Dalgarno sequence upstream of the initiation codon was selected for functional analysis for bacterial inhibition. In total, 98 ORFs were selected and screened as detailed below. A list of these is presented in Table 5. Each individual ORF, from initiation codon to last codon (excluding the stop codon), was amplified from phage genomic DNA using the polymerase chain reaction (PCR). For PCR amplification of ORFs, each sense strand primer targets the initiation codon and is preceded by a *BamH*I restriction site ($^{5'}$cgggatcc$^{3'}$) and each antisense oligonucleotide targets the pentultimate codon (the one before the stop codon) of the ORF and is

preceded by a *Sal* I restriction site (5'gcgtcgaccg3') (SEQ ID NO. 1). The PCR product of each ORF was gel purified and digested with *BamH*I and *Sal*I. The digested PCR product was then gel purified using the Qiagen kit as described, ligated into *BamH*I and *Sal*I digested pTHA vector, and used to transform *E. coli* bacterial strain DH10β(as described above). As a result of this manipulation, the HA tag is set inframe with the ORF and is positioned at the carboxy terminus of each ORF (pTHA/ORF clones). Recombinant pTHA/ORF clones were picked and their insert sizes were confirmed by PCR analysis using primers flanking the cloning site. The names and sequences of the primers that were used for the PCR amplification were: HAF: 5'TATTATCCAAAACTTGAACA3' (SEQ ID NO. 2); HAR: 5'CGGTGGTATATCCAGTGATT3' (SEQ ID NO. 3). The sequence integrity of cloned ORFs was verified directly by DNA sequencing using primers HAF and HAR. In cases where verification of ORF sequence could not be achieved by one pass with the sequencing primers, additional internal primers were selected and used for sequencing.